



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,997	03/13/2001	William Henry Mengel	RCA-89130	1650

7590

06/13/2005

Joseph S Tripoli
Thomson Multimedia Licensing Inc
P O Box 5312
Princeton, NJ 08540

EXAMINER

NATNAEL, PAULO S M

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/743,997

Applicant(s)

MENGEL, WILLIAM HENRY

Examiner

Paulos M. Natnael

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added limitation "non-OSD control information" is considered new matter. If applicant contends this is not new matter, applicant should point out specific location (page #, line #) in the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

While, the specification discloses that "a resident OSD feature" is used "to insert control or other information such as signatures or watermarks during non-blanking portions of the signal, e.g. active display intervals, the newly added phrase "non-OSD

control information" is not clear what it is referring, non-OSD control information nonetheless formatted as an OSD data.

5. The newly added limitation is considered below.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 9 is rejected under 35 U.S.C. 102(e) as being anticipated by Ogino, U.S. Patent No. **6,449,425**.

Considering claim 9, Ogino discloses a video signal output device such as information signal duplication prevention comprising detection sections 15 and 16 (Fig.2) which receive a digital video input and provide S5 and S6 signals to output control signal generation section 17 which receives the S5 and S6 signals and generates an S7 signal. The notice message generation section 18 (Fig.8) uses so-called OSD (on screen display), and generates a notice message of 1 screen and outputs it. (col. 13,

lines 38-46) Ogino also discloses/provides an output control section 14 which is used to combine or synthesize the S4 analog signal and S7 signal output from the generator 17. Ogino discloses that the notice message generation section 18 generates and outputs a display message for noticing a user that the video signal recorded in the disk 100 is an illegally duplicated video signal correspondingly to the control signal S8 supplied from the output control signal generation section 17.

8. Claim 1 is **again** rejected under 35 U.S.C. 102(e) as being anticipated by Sparks, U.S. Patent No. **6,034,738**.

Considering claim 1, Sparks discloses the display device 300 which receives the AV+OSD signal 103, Fig.2, which is an analog signal comprising audio/video and OSD data. col. 8, lines 3-6 (see also col. 4, lines 62-65) Sparks also discloses the display 300 and the selector 310 which is controlled by CRTL. Furthermore, Sparks teaches that "a signal selector 310, couples as is known, to video and synchronizing processing circuitry, not shown, which in combination generate an image display," (col. 8, lines 8-16) which inherently extracts the OSD data from the Audio/video signal, and transfers it to the display. Finally, Sparks' display 300 processes and displays the signals as well as the non-video OSD data on display 300 as shown on Fig.2;

9. Claims **1-3, 5-8** are rejected under 35 U.S.C. 102(e) as being anticipated by Knox et al., U.S. Pat. No. 6,480,238.

Art Unit: 2614

Considering claim 1, Knox discloses a Display 190, Fig.1; (Notice the video decoder 160 and the OSD Unit 150) which would have to detect the signal including the OSD data. As such, the display would not be able to display the OSD without first detecting it as shown in Fig.3 which illustrates a displayed frame (background) and the OSD1 352 and OSD2 354 signals. Display 190 processes and displays the OSD data.

Considering claim 2, the claimed method of wherein the OSD data is inserted into the analog video signal during non-blanking portions, is met by the disclosure that "The OSD unit can be used to display a user defined bit map over any part of the displayable screen, independent of the size and location of the **active video** area." (col. 4, lines 64-66)

Considering claim 3, the claimed method wherein the non-video auxiliary data is control data, is met by the disclosure "Processor 130 performs various control functions, including but not limited to, providing control data to the video decoder 160 and OSD unit 150..." (col. 3, lines 11-14)

Considering claim 5, the claimed method wherein the non-video auxiliary data is contained in the digital video signal is met by the output of the output signal of the OSD 150, fig.1, which is a digital signal input to the D/A converter (DAC) 185.

Considering claim 6, the claimed method wherein the non-video auxiliary data is determined by the video receiver is met by the Control microprocessor which determines which data to send to the OSD 150, fig.1;

Considering claim 7, the claimed method wherein the OSD data is displayable in an overscan region, is met by the disclosure that "The OSD unit can be used to display a user defined bit map over any part of the displayable screen, independent of the size and location of the active video area." (col. 4, lines 64-66)

Considering claim 8, the claimed method wherein the non-video data is wherein the video receiver provides a sync signal to the external device, is met by the disclosure that "Horizontal and vertical sync signals are separated at a separator and then used to synchronize the reading functions from memory." (col. 1, lines 42-48)

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al., U.S. Pat. No. 6,480,238.

Regarding claim 4, Knox doesn't specifically disclose that the non-video data is information usually included in a blanking interval of an analog video signal. However, Examiner takes Official Notice here in that it is notoriously well known in the art that a non-video data or information would be included in the vertical blanking interval of the video signal, for example, and therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Knox by including or providing the non-video data in the blanking interval of the analog video signal in order for the receiver to reliably extract the non-video data from the VBI and display or transmit the same to other devices within the system, so that the active video portion would be used for the main video signal.

Considering claim 9, Knox discloses the following claimed subject matter, note;

- a) receiving a digital signal is met by decoding system 100 which receives the bitstreams 110 and 130, (fig.1).
- b) providing the non-OSD control information to an OSD generator, is met by OSD unit 150, fig.1, which receives the OSD data from processor 130.
- c) formatting the non-OSD control information as OSD data, is met by OSD Unit 150, fig.1;
- d) converting the digital video signal to analog video signal, is met by DAC 185, fig.1.

f) providing the analog signal including the non-OSD control information signal formatted as OSD data to an external device, is met by DAC 185 which delivers the signal to the Display device.

Except of;

e) inserting the OSD data into the analog video signal;

Regarding e), the OSD mixer 170 in fig.1 is a digital mixer. However, the Examiner takes Official Notice in that inserting OSD data into the analog video signal is notoriously well known in the art and therefore, it would have been obvious to the skilled in the art at the time the invention was made to modify the system of Knox et al. by providing a DAC converter in the decoder 100 (in contrast to the DAC being outside the decoder) to convert the video signal into analog domain before adding the OSD data into the signal, so that the system of Knox is made more compact and able to save cost of the overall system.

Response to Arguments

The applicant argues that although display 300 receives an A/V+OSD 103 as illustrated in Figure 2 of Sparks, display 300 neither discloses nor suggests "extracting the detected non-OSD control information from the analog signal." This argument is incomprehensible because it is clear that the Sparks' system discloses the display 300, as admitted by applicant and receives A/V+OSD 103. On col. 6, lines 442-45, Sparks teaches that an OSD message command may be generated responsive to controller

205" which has been added to the A/V data is carried to the display in the A/V+OSD signal 103. One with ordinary skill in the art would readily recognize that the received OSD data has to be extracted to be of any use. What is the use of an OSD data if it isn't extracted and/or displayed for the user to see or manipulate? This OSD data clearly is a control information formatted as an OSD data and the said control information may be extracted and displayed for the user/viewer/operator to manipulate or otherwise for the system to process further. This particular argument is therefore unpersuasive.

Knox et al disclose a system 100 which receives digital bit streams 110 and 120 and OSD_unit 150 which can be used to display a user defined bit map over any part of the displayable screen, independent of the size and location of the active video area. (col. 4, lines 64-66) That it clearly shows that the OSD bitstream is received in the processor 130 as non-video data designated as OSD data. The mixer mixes the OSD data with the video data and the D/A converter converts the signal into analog signal and outputs it to the display. Detection and extraction of the OSD data is inherently the function of the display 190. Therefore, the argument that Knox does not disclose the claim as claimed is unpersuasive.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 10:00am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571)272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PAULOS M. NATNAEL
PATENT EXAMINER

PMN
June 9, 2005

Primary Examiner